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EDITORIAL.—DR. GEO. THURBER, the distinguished botanist, so well known from his work in the *Gramineæ*, sailed for Europe Sept. 2nd. We understand his object is a study of the various Experimental Stations in France, Germany and England, in the interest of progressive agriculture.

FERNS OF NORTH AMERICA.—Since the issue of the last part (No. 27) of Prof. Eaton's great work, bearing the above title, several species have been discovered, either entirely new, or new to this country, and a considerably larger number are likely to be found in the future. Many of the subscribers have urged the publisher, Mr. S. E. Cassino, to issue new parts from time to time as new species are discovered; these supplementary parts in time to constitute Vol. 3. This will be done if a sufficient number of subscribers agree to continue. The price and style of the work will remain unchanged. Probably not more than from 2 to 4 parts will be issued per year. Those wishing to aid in keeping this great work abreast of the times should send their names immediately to the publisher, S. E. Cassino, 299 Washington St., Boston, Mass.

A LETTER FROM BARON EGGERS informs us "that the first set of 100 species of dried West Indian plants is now ready for distribution, as are also sets of fruits and seeds, and of woods (cross sections of stems 10 centim. long) and arboreous vines. The following very low prices have been fixed, and we take pleasure in making them known to our subscribers:

100 dried plants,	\$8.00.
100 species fruits and seeds,	7.00.
100 species woods,	16.00.
50 species arboreous vines,	16.00.

Of the arboreous vines, each species is represented by 10 pieces of the stem, 25 centim. long, of various thicknesses. Transportation is prepaid. Subscriptions for any of the above sets will be received by the Curator of the Botanical Museum at Harvard University, Cambridge, Mass., who will also see the collections properly forwarded.

HORTICULTURIST'S NAMES sometimes grow to as great a length as the good old names given to plants before the system of binomial nomenclature came into use. The latest addition to ornamental trees is *Acer Plantanoides Aurea variegatum Buntzleri*, or, in other words, a striped leaf maple.

PROF. MARCUS E. JONES, Grinnell, Iowa, has had the good fortune of having quite a lengthy paper (64 pp.) translated into French

and published by no less an association than the Federation of Horticultural Societies of Belgium. It is entitled "Une Excursion Botanique au Colorado et dans le Far West" and is translated by Dr. Henri Fonsny, of Verviers. Prof. Jones is collecting largely in the west and enough of his specimens have reached Europe to make him known there, and the desire to know more of the country that produces such plants has led to the writing of this paper.

THE IOWA ACADEMY OF SCIENCES has published a pamphlet of some 30 pages containing its proceedings from August 1875, the date of organization, to July 1880. The number of Fellows cannot exceed 30, and only such persons as have done good scientific work are eligible, the assent of three-fourths of the members being necessary to a choice. From the list of Fellows given the note but two to whom some branch of botany is credited as a specialty, namely, Prof. C. E. Bessey and Dr. C. M. Hobby. The latter gentleman publishes a list of the "Fresh Water Algæ found in Iowa." Twenty-seven genera are represented by seventy two species, *Spirogyra* containing eighteen.

THE STEM OF PUMPKIN FOR ILLUSTRATING PLANT HISTOLOGY.—The stem of the common pumpkin (*Cucurbita Pepo*) is admirably adapted for use in the laboratory to illustrate many kinds of cell-structures, and the larger part of the tissues of the higher plants. It is of a convenient size to be held for sectioning, and after remaining in a sufficient quantity of strong alcohol for awhile becomes very solid, so that exceedingly thin sections are easily obtained. The cells are comparatively large and a power of 250 to 500 diameters will demonstrate almost every detail.

A cross-section of the stem shows without magnification five small fibro-vascular bundles lying beneath the five angles of the stem, with the same number of much larger bundles situated between them, but deeper. These are imbedded in the fundamental tissue, and the whole surrounded by a cortical rind. The center of the stem is hollow, due to rupture of the fundamental tissue from expansion by growth. Other features of the stem can be made out without a microscope, but it is best to revert to them after their full significance is understood.

An enumeration of the kinds of cells and tissues to be met with will answer the purpose of this notice, as no extended description is intended. The cortical rind is composed of epidermis and hypodermis. Three forms of cells belong to the epidermal system—simple epidermis cells, hairs, and guard-cells of the stomata, the latter best studied in cross sections of the stem. The fundamental system comprises the large-celled, thin walled parenchyma in which the fibro-vascular bundles lie, and the hypodermal tissues. The parenchyma is colorless and varies little except in size of the cells. The hypodermis consists of two layers, encircling the stem, partly performing the office of imparting strength, and partly containing assimilative protoplasm. The innermost of these is of uniform thickness and made up of slender wood cells. Thin transverse septa are occasionally met with, which